



PAROS Initiatives in Indonesia (Pilot Data from Malang)

*Ali Haedar
Emergency Physician & Lecturer
Indonesia*



- ▶ We would like to extend our thanks to the Asian Emergency Medical Services (EMS) Council for inviting Malang to participate in the Pan–Asian Resuscitation Outcomes Study (PAROS) Clinical Research Network



Improving Outcomes from Pre-hospital and Emergency Care across the Asia-Pacific

1 Feb 2012

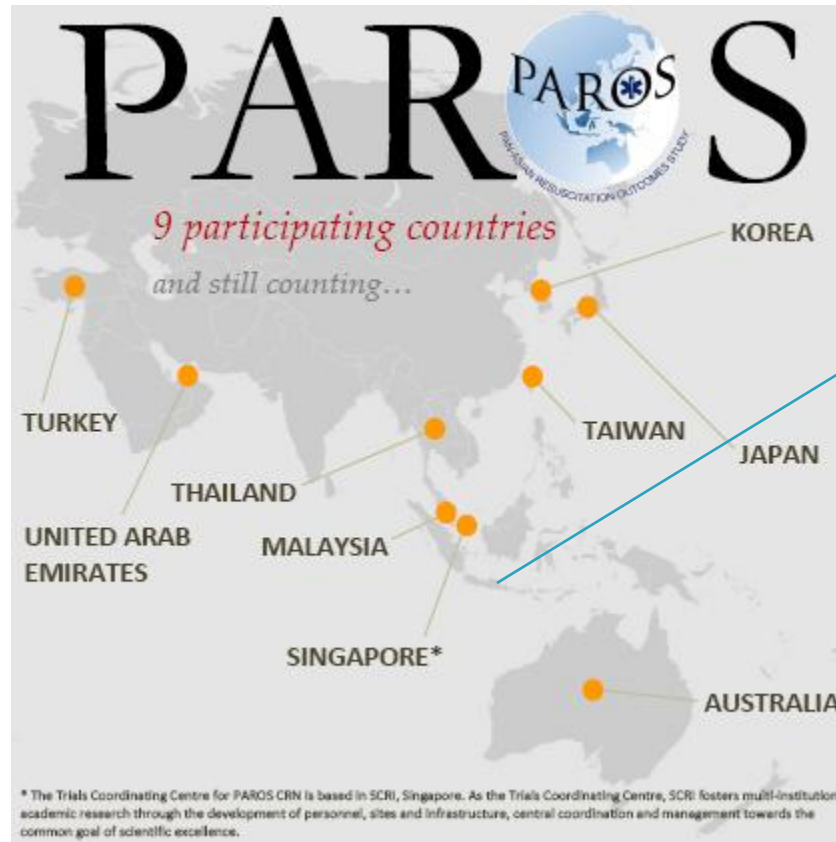
Dean
Faculty of Medicine
University of Brawijaya
Jl. Veteran, Malang 65141
Indonesia

Dear Sir/Madam,

**LETTER OF INVITATION TO PARTICIPATE IN THE PAN-ASIAN RESUSCITATION OUTCOMES STUDY (PAROS)
CLINICAL RESEARCH NETWORK**

The Pan-Asian Resuscitation Outcomes Study (PAROS) is a collaborative research group formed in 2010 with the aim to improve outcomes from Pre-hospital and Emergency Care across the Asia-Pacific region by promoting high quality research into resuscitation.

Participating countries



INDONESIA



How do we commence?

Pre-Hospital Workgroup for EMS Development Project



Team members:

1. Sri Andarini, MD, PhD (Public Health)
2. Saifur Rohman, MD, PhD (Cardiologist)
3. Hidayat Suyuti, MD, PhD (Research Board Director)
4. Ali Haedar, MD (Emergency Physician)
5. Yuddy Imowanto, MD (Emergency Physician)
6. Suryanto Eko Agung, MD (Emergency Physician)



The Starting Point

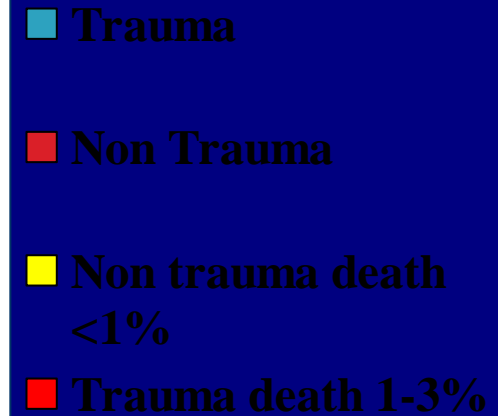
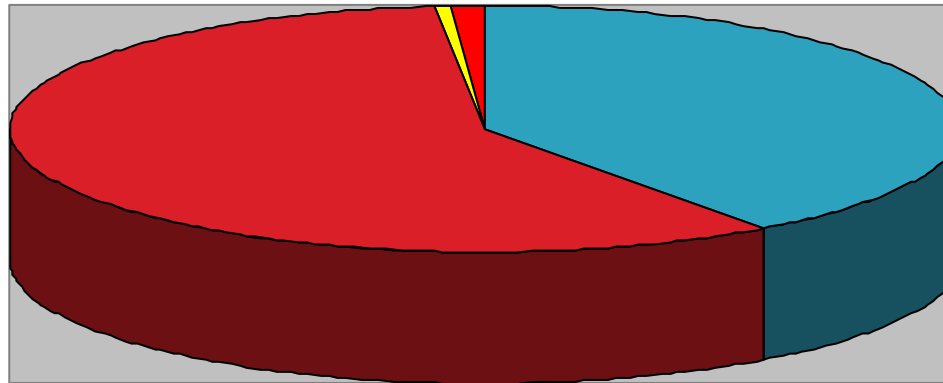
- ▶ We have commenced the **preliminary** International Study on Out-of-Hospital Cardiac Arrest (OHCA) since 1 March 2012
- ▶ Only in Saiful Anwar General Hospital
- ▶ 3 patients are included in 1 month period, with 2 ROSC cases
- ▶ 45 patients are excluded (who are immediately pronounced dead, and for whom resuscitation is not attempted).



Why only 3 cases...

- ▶ Malang is small town
- ▶ Only 1 hospital engaged
- ▶ Citizen's poor knowledge of Ambulance 118 services
- ▶ Very-low income family \approx unaffordable ambulance cost
- ▶ Victims are immediately pronounced dead, and resuscitation is not attempted

Emergency cases in RSSA (Haedar, 2007)



Trauma = 13,383 (49.7%) out of 26,907 total annual attendance

Trauma cases = 36 persons/day

Men = 9758 (72.92%), women = 3625 (27.08%)

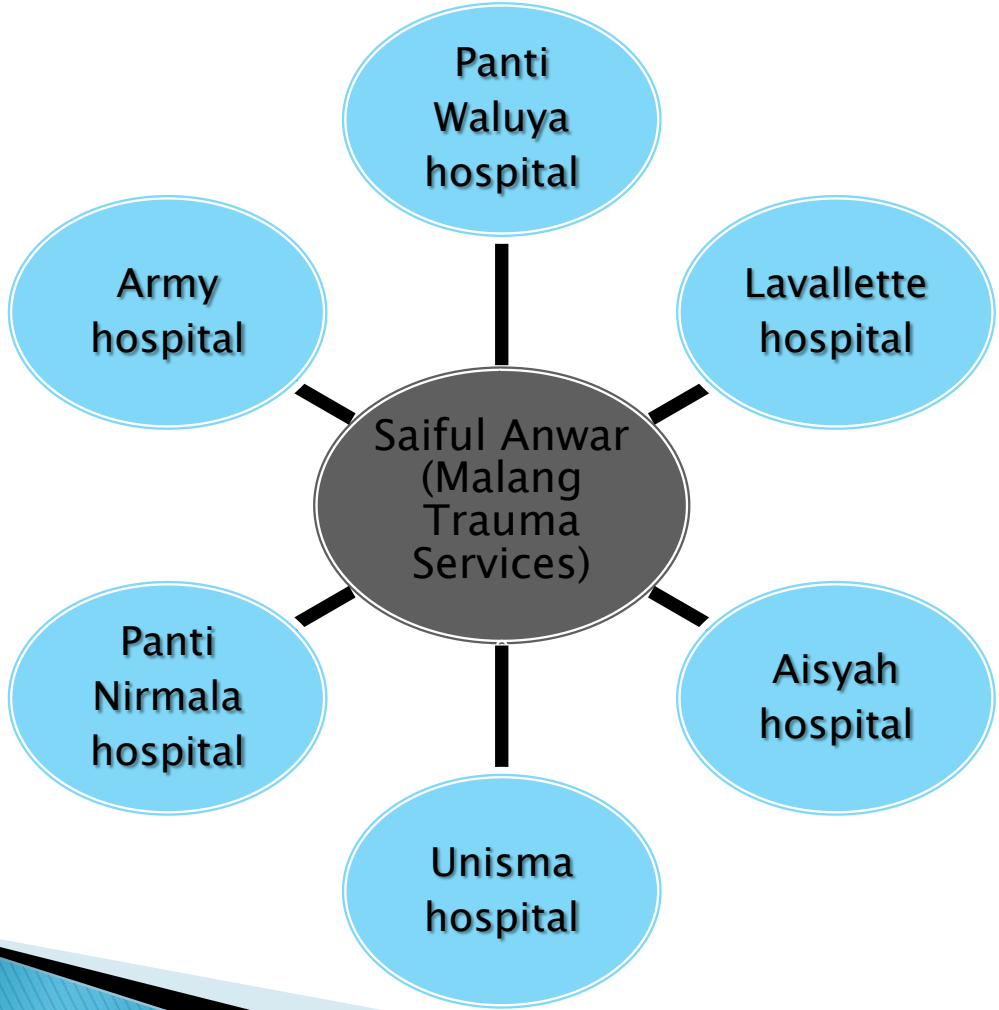
Saiful Anwar General Hospital Malang:

- 23,747 (89%) were brought by other vehicles
- 3160 (11%) were brought by ambulance, without proper pre-hospital management:
 - 348 (11%) died as they arrived in the hospital



Our plans to extend the study

Hospital Networks in Malang



SPGDT-S (Daily Integrated Emergency Care System)

MITIGATION

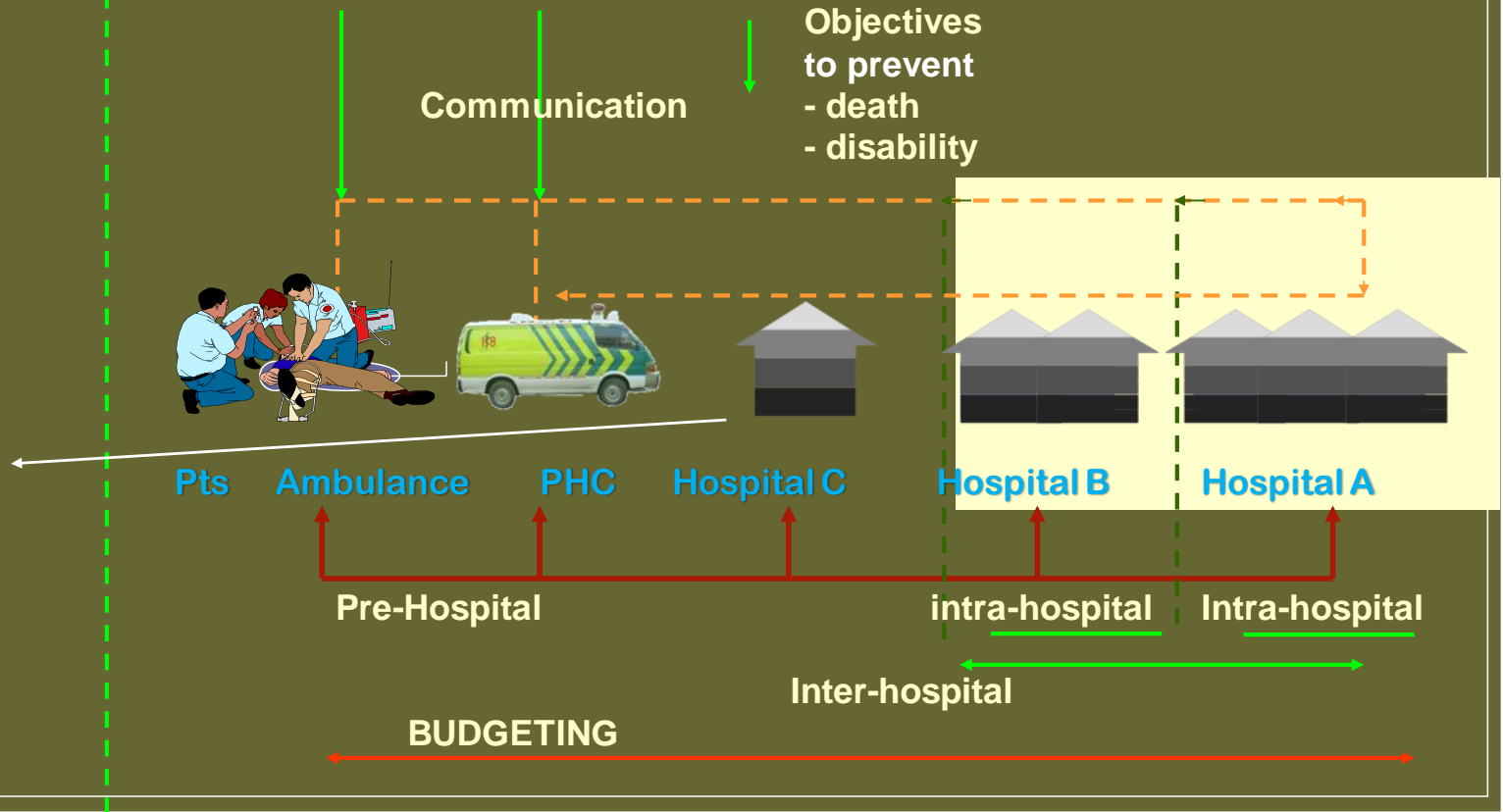
- Safe driving
- Helmet
- Safety belt

PREPAREDNESS

- Human Resources
- First responder
- Bystanders

RESPONSE

- Multidisciplinary
- Multi-professions
- Multi-sectors
- Doctors
- Nurses



TIME SAVING IS LIFE SAVING
SHORTEN RESPONSE TIME
REFER THE RIGHT PATIENT, TO THE RIGHT PLACE AT THE RIGHT TIME

Prof. Hideharu Tanaka encouraged the importance of EMS services



Layperson CPR and defibrillation in the public area- the Japanese experience

Hideharu Tanaka MD,PhD,

Professor and Chairman

EMS systems, Graduate School, Kokushikan University

Member of Resuscitation committee, AED committee, CPR implementation committee



April 2012 at Surabaya, Indonesia



Steps

1. To invite satellite hospitals in Malang to join the research
2. To collaborate with Malang Trauma Services (Ambulance 118)
3. To invite other Emergency physicians from hospitals in other cities/town to join the research



Challenges Encountered



Challenges encountered

1. We are still proposing a budget from the University/Hospital
2. The grant will only be given in July 2012
3. Non-standardized emergency dispatch records, ambulance patient case notes, and emergency department records
4. EM is NOT recognized as yet by the Indonesia College of Medicine... But probably by contributing to EMS system will help
5. IRB or approval letter pending



DISASTER & PRE-HOSPITAL MEDICAL RECORD

Division of Disaster Medicine
Department of Emergency Medicine
Faculty of Medicine - University of Brawijaya, INDONESIA



DATE : [] [] [] [] [] [] ID : [] [] [] [] [] [] [] [] [] [] [] []
NAME : _____ DISPATCH INFORMATION : Transferred Comes alone Dispatched
ADDRESS : _____ By: _____ Location: _____
PHONE NO : _____ TRAGE : IMMEDIATE (P1) DELAYED (P2) MINOR (P3)
MOBILE PHONE : _____ CASE TYPE :
_____ Trauma Non Trauma
_____ Disaster Victim Non Victim
DOB : [] [] [] [] [] [] AGE: [] [] GENDER: Male Female

TIME LOG
Time Call Received : [] [] [] [] [] [] Time From Scene : [] [] [] [] [] []
Time Enroute : [] [] [] [] [] [] Time at Destination : [] [] [] [] [] []
Time Arrived at Scene : [] [] [] [] [] [] Time at Base : [] [] [] [] [] []

POSITION ON ARRIVAL
 Standing Patient Refused Care
 Sitting Dead on Scene
 Prone lying Cancelled
 Supine lying No Patient Found
 Trapped

PATIENT DISPOSITION
 No Treatment Required
 Patient Refused Care
 Dead on Scene
 Cancelled
 No Patient Found

CERVICAL SPINE INJURY
 Yes No
SNRN
 Normal Jaundice
 Pale Diaphoretic
 Cyanotic

CHIEF COMPLAINT (NON TRAUMA)
 Cardiac Arrest
 Pain Head Chest Back Neck Abdomen Extremities
Other, specify: _____
 Vomiting
 Weakness Coronary Vascular Accident / Stroke
Other, specify: _____
 Diarrhoea
 Bleeding Nose GIT Urogenital
Other, specify: _____
 Difficulty of breathing Asthma Cardiac Failure COPD
Other, specify: _____
 Epilepsy
 Altered Mental Status Hypoglycemia Alcoholic Intoxication
Other, specify: _____
 Maternity / child birth
Other, specify: _____

CHIEF COMPLAINT (TRAUMA)
Mechanism of Injury
 Trauma-Blunt Deceleration Falls Crush Injury
 Penetrating
 Blast
 Amputation
 Burns
 Poisoning
 Drowning
Other, specify: _____

FAST MEDICAL HISTORY
 Diabetes
 Hypertension
 Asthma
 Renal Failure
 Convulsions
 Fainting spells
 Heart Problem
 Bleeding Disorder
 ALLERGY (Food, medication, animal, plant)
Please specify: _____
 Cancer, site: _____
Other, specify: _____
Medication: _____

IF ROAD ACCIDENT
Type of Vehicle
 Lorry Bus Car
 Pedal Cycle Van Motorcycle
 Pedestrian Others: _____

Position of Patient
 Driver Passenger Front seat passenger
 Pillion Rear seat passenger
Vehicle Collided with
 Lorry Bus Car
 Pedal Cycle Van Motorcycle
 Pedestrian Others: _____

TYPE OF ACCIDENT
 Vehicle Traffic Road Rail Air Sea
 Road - non traffic
 Suicide / Parasiticide
 Industrial injury
 Sport / Recreational injury
 Training injury
 Home injury
 Assault
Other, specify: _____

SAFETY DEVICE USED (IF ANY)
 Helmet
 Seat Belt
 Air Bag
 Safety Boots
Other, specify: _____

VITAL SIGNS											
TIME	RESP	PULSE	BP	LOC	GCS	R PUPILS	L	SNRN	TEMP	SpO2	GLUCOSE LEVEL
[] [] [] []	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular <input type="checkbox"/> Shallow <input type="checkbox"/> Laboured	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular	[] [] [] []	<input type="checkbox"/> Alert <input type="checkbox"/> Voice <input type="checkbox"/> Pain <input type="checkbox"/> Unresponsive	[] [] [] []	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Cool <input type="checkbox"/> Moist <input type="checkbox"/> Pale <input type="checkbox"/> Dry <input type="checkbox"/> Cyanotic <input type="checkbox"/> Jaundice <input type="checkbox"/> Warm	[] [] [] []	[] [] [] []	[] [] [] []
[] [] [] []	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular <input type="checkbox"/> Shallow <input type="checkbox"/> Laboured	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular	[] [] [] []	<input type="checkbox"/> Alert <input type="checkbox"/> Voice <input type="checkbox"/> Pain <input type="checkbox"/> Unresponsive	[] [] [] []	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Cool <input type="checkbox"/> Moist <input type="checkbox"/> Pale <input type="checkbox"/> Dry <input type="checkbox"/> Cyanotic <input type="checkbox"/> Jaundice <input type="checkbox"/> Warm	[] [] [] []	[] [] [] []	[] [] [] []
[] [] [] []	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular <input type="checkbox"/> Shallow <input type="checkbox"/> Laboured	Rate: _____ <input type="checkbox"/> Regular <input type="checkbox"/> Irregular	[] [] [] []	<input type="checkbox"/> Alert <input type="checkbox"/> Voice <input type="checkbox"/> Pain <input type="checkbox"/> Unresponsive	[] [] [] []	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Normal <input type="checkbox"/> Dilated <input type="checkbox"/> Constricted <input type="checkbox"/> Sluggish <input type="checkbox"/> No reaction	<input type="checkbox"/> Cool <input type="checkbox"/> Moist <input type="checkbox"/> Pale <input type="checkbox"/> Dry <input type="checkbox"/> Cyanotic <input type="checkbox"/> Jaundice <input type="checkbox"/> Warm	[] [] [] []	[] [] [] []	[] [] [] []

Standardized Medical Record for Disaster & Pre-hospital

Think globally, act globally, empower with local capacities

(courtesy of Dr Ali Haedar)



Our Own Objectives & Outcomes



We aim to identify what we need for a standardized emergency dispatch records, ambulance patient case notes, and emergency department records

...in order to improve...

A better EMS system in Indonesia.



Thank you...